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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/874,091	06/04/2001	Deborah Charych	1680.002	6042

7590

12/21/2005

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EXAMINER

TRAN, MY CHAU T

ART UNIT

PAPER NUMBER

1639

DATE MAILED: 12/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/874,091	Applicant(s) CHARYCH ET AL.	
	Examiner MY-CHAU T. TRAN	Art Unit 1639	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 October 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,60-73,79-91 and 97-101 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,60-73,79-91 and 97-101 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Application and Claims Status

1. Applicant's amendment and response filed 10/03/2005 is acknowledged and entered.

Claims 1, 73, and 99-101 have been amended.

2. The amendment filed on 04/06/2005: cancelled claims 92-96; amended claims 1 and 73; and added claims 97-101.

3. The amendment filed on 07/30/2004: amended claims 1, and 73; and added claims 92-96.

4. The amendment filed on 03/18/2004: cancelled claims 55-59 and 74-78; and amended claims 1, 60-61, 72-73, and 79-80.

5. The amendment filed on 06/30/2003: cancelled claims 2-20, and 53; amended claim 1; and added claims 55-91.

6. The amendment filed on 12/09/2002: cancelled claims 21-52, and 54; and amended claims 3, 9, 16, and 20.

7. Claims 1, 60-73, 79-91, and 97-101 are pending.

8. Claims 1, 60-73, 79-91, and 97-101 are under consideration in this Office Action.

Priority

9. This instant application claims benefit to a provisional application of 60/209,711 filed 06/05/2000. This instant application is granted the benefit of priority for 60/209,711 under 35 U.S.C 119(e).

New Rejection(s) – Necessitated by Amendment

Claim Rejections - 35 USC § 112

10. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

11. Claims 1, 60-72, and 99-101 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. This is a new matter rejection.

The instant invention recites an array. The array comprises a) a solid substrate having a substantially planar surface comprising a layer of aluminum formed on a glass base material, the aluminum coated with a silicon dioxide coating having a thickness of between about 200 and 900Å; and b) a plurality of different protein-binding agents bound to said substrate. Each of said protein-binding agents comprises 1) an anchoring segment stably bound to the substrate surface; 2) a peptidomimetic protein-binding segment; and 3) a linker segment connecting and separating the anchoring and peptidomimetic segments. The array does not define a diffraction grating

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from which a diffracted light signal indicating the presence of a protein bound to one or more of the protein binding agents is obtained.

The recitation of the 'array does not define a diffraction grating from which a diffracted light signal indicating the presence of a protein bound to one or more of the protein binding agents is obtained' claimed in claim 1, have no clear support in the specification and the claims as originally filed. The instant specification is silent on the newly added limitation that the *'array does not define a diffraction grating from which a diffracted light signal indicating the presence of a protein bound to one or more of the protein binding agents is obtained'* and the newly added term "diffraction grating". While there is no in haec verba requirement, newly added claim limitations must be supported in the specification through express, implicit, or inherent disclosure. See MPEP § 2163 I(b). No such supports were found for the newly added limitations. Additionally, any negative limitation or exclusionary proviso must have basis in the original disclosure. See MPEP § 2173.05(i). Furthermore, the instant drawing, i.e. figures 9-11, and disclosure, i.e. page 37, line 15 thru pg. 38, line 8, disclose that the array does *'define a diffraction grating from which a diffracted light signal indicating the presence of a protein bound to one or more of the protein binding agents is obtained'*, which is a positive recitation of the instant claimed array. Therefore, the scope of the invention as originally disclosed in the specification would not encompass the scope of the newly added limitation that the *'array does not define a diffraction grating from which a diffracted light signal indicating the presence of a protein bound to one or more of the protein binding agents is obtained'*.

If applicants disagree, applicant should present a detailed analysis as to why the claimed subject matter has clear support in the specification.

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12. Claims 73, 79-91, 97, and 98 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. This is a new matter rejection.

The instant invention recites a kit. The kit comprises an array and one or more reagents for conducting a differential binding assay. The array comprises a) a solid substrate having a substantially planar surface comprising a layer of aluminum formed on a glass base material, the aluminum coated with a silicon dioxide coating having a thickness of between about 200 and 900Å; and b) a plurality of different protein-binding agents bound to said substrate. Each of said protein-binding agents comprises 1) an anchoring segment stably bound to the substrate surface; 2) a peptidomimetic protein-binding segment; and 3) a linker segment connecting and separating the anchoring and peptidomimetic segments. The array does not define a diffraction grating from which a diffracted light signal indicating the presence of a protein bound to one or more of the protein binding agents is obtained. The reagent comprises a plurality of fluorescent labels for proteins.

The recitation of the 'array does not define a diffraction grating from which a diffracted light signal indicating the presence of a protein bound to one or more of the protein binding agents is obtained' claimed in claim 73, have no clear support in the specification and the claims as originally filed. The instant specification is silent on the newly added limitation that the *'array does not define a diffraction grating from which a diffracted light signal indicating the presence of a protein bound to one or more of the protein binding agents is obtained'* and the

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newly added term “diffraction grating”. While there is no in haec verba requirement, newly added claim limitations must be supported in the specification through express, implicit, or inherent disclosure. See MPEP § 2163 I(b). No such supports were found for the newly added limitations. Additionally, any negative limitation or exclusionary proviso must have basis in the original disclosure. See MPEP § 2173.05(i). Furthermore, the instant drawing, i.e. figures 9-11, and disclosure, i.e. page 37, line 15 thru pg. 38, line 8, disclose that the array does ‘*define a diffraction grating from which a diffracted light signal indicating the presence of a protein bound to one or more of the protein binding agents is obtained*’, which is a positive recitation of the instant claimed array. Therefore, the scope of the invention as originally disclosed in the specification would not encompass the scope of the newly added limitation that the ‘*array does not define a diffraction grating from which a diffracted light signal indicating the presence of a protein bound to one or more of the protein binding agents is obtained*’.

If applicants disagree, applicant should present a detailed analysis as to why the claimed subject matter has clear support in the specification.

Withdrawn Objection(s) and /or Rejection(s)

13. The objection of claims 99-101 has been withdrawn in light of applicant’s amendments of claims 99-101.

14. The rejection of claims 1, 60-61, 63-66 and 99-101 under 35 USC 103(a) as being obvious over Gustafson et al. (US Patent 5,478,527) and Chenchik et al. (US Patent 6,087,102) has been withdrawn in view of applicant’s amendments of claim 1, i.e. the newly added

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limitation that the *'array does not define a diffraction grating from which a diffracted light signal indicating the presence of a protein bound to one or more of the protein binding agents is obtained'*. However since the newly added limitations have found no support in the specification, the withdrawn prior art rejections could be reinstated if claim 1 is amended to remove the newly added limitations.

15. The rejection of claims 62 under 35 USC 103(a) as being obvious over Gustafson et al. (US Patent 5,478,527) and Chenchik et al. (US Patent 6,087,102) as applied to claims 1, 60-61, 63-66 and 99-101, and further in view of Wagner et al. (US Patent 6,329,209 B1) has been withdrawn in view of applicant's amendments of claim 1, i.e. the newly added limitation that the *'array does not define a diffraction grating from which a diffracted light signal indicating the presence of a protein bound to one or more of the protein binding agents is obtained'*. However since the newly added limitations have found no support in the specification, the withdrawn prior art rejections could be reinstated if claim 1 is amended to remove the newly added limitations.

16. The rejection of claims 67-72 under 35 USC 103(a) as being obvious over Gustafson et al. (US Patent 5,478,527) and Chenchik et al. (US Patent 6,087,102) as applied to claims 1, 60-61, 63-66 and 99-101, and further in view of Barrett et al (US Patent 5,482,867) has been withdrawn in view of applicant's amendments of claim 1, i.e. the newly added limitation that the *'array does not define a diffraction grating from which a diffracted light signal indicating the presence of a protein bound to one or more of the protein binding agents is obtained'*. However

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since the newly added limitations have found no support in the specification, the withdrawn prior art rejections could be reinstated if claim 1 is amended to remove the newly added limitations.

17. The rejection of claims 73, 79-80, 82-85, 97, and 98 under 35 USC 103(a) as being obvious over Gustafson et al. (US Patent 5,478,527) and Chenchik et al. (US Patent 6,087,102) has been withdrawn in view of applicant's amendments of claim 73, i.e. the newly added limitation that the '*array does not define a diffraction grating from which a diffracted light signal indicating the presence of a protein bound to one or more of the protein binding agents is obtained*'. However since the newly added limitations have found no support in the specification, the withdrawn prior art rejections could be reinstated if claim 73 is amended to remove the newly added limitations.

18. The rejection of claims 81 under 35 USC 103(a) as being obvious over Gustafson et al. (US Patent 5,478,527) and Chenchik et al. (US Patent 6,087,102) as applied to claims 73, 79-80, 82-85, 97, and 98 above, and further in view of Wagner et al. (US Patent 6,329,209 B1) has been withdrawn in view of applicant's amendments of claim 73, i.e. the newly added limitation that the '*array does not define a diffraction grating from which a diffracted light signal indicating the presence of a protein bound to one or more of the protein binding agents is obtained*'. However since the newly added limitations have found no support in the specification, the withdrawn prior art rejections could be reinstated if claim 73 is amended to remove the newly added limitations.

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19. The rejection of claims 86-91 under 35 USC 103(a) as being obvious over Gustafson et al. (US Patent 5,478,527) and Chenchik et al. (US Patent 6,087,102) as applied to claims 73, 79-80, 82-85, 97, and 98 above, and further in view of Barrett et al (US Patent 5,482,867) has been withdrawn in view of applicant's amendments of claim 73, i.e. the newly added limitation that the *'array does not define a diffraction grating from which a diffracted light signal indicating the presence of a protein bound to one or more of the protein binding agents is obtained'*. However since the newly added limitations have found no support in the specification, the withdrawn prior art rejections could be reinstated if claim 73 is amended to remove the newly added limitations.

Conclusion

20. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to My-Chau T. Tran whose telephone number is 571-272-0810. The examiner can normally be reached on Monday: 8:00-2:30; Tuesday-Thursday: 7:30-5:00; Friday: 8:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew J. Wang can be reached on 571-272-0811. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

mct
December 14, 2005


PADMAASHRI PONNALURI
PRIMARY EXAMINER